**Algebra I Name:**

**2.5 Word Problem Equations Date:**

**Main Idea:** When you encounter a problem with more than one unknown quantity, follow these steps:

1. Use variables to **define** the unknown quantities
2. **Relate** the variables to each other (using an equation)
3. **Write an equation** using your variables and the information in the problem and solve

1. The length of Mr. Stiff’s dream swimming pool is 3.3 times its width. If the length of the pool is 66 feet, how wide is Mr. Stiff’s dream swimming pool?

**Define:**

**Relate:**

**Equation:**

1. The width of a rectangle is 2 cm less than its length. The **perimeter** of the rectangle is 16 cm. What is the length of the rectangle?

**Define:**

**Relate:**

**Equation:**

1. Mr. Stiff has two daughters, Dorothy and Eleanor. Dorothy is 1.5 years older than Eleanor. If their combined age right now is 5.5, how old is Eleanor? *Bonus: How old is Dorothy?*

**Define:**

**Relate:**

**Equation:**

1. The length of a rectangle is 3 in more than its width. The **perimeter** of the rectangle is 30 in. What is the length **and** width of the rectangle?

**Define:**

**Relate:**

**Equation:**

1. The number of math teachers at Washington Latin is 3 more than then number of Latin teachers. If there are a total of 21 math and Latin teachers, how many Latin teachers are there?

**Define:**

**Relate:**

**Equation:**

1. The width of a rectangle is one half of its length. The **perimeter** of the rectangle is 54 cm. What are the width and length of the rectangle?

**Define:**

**Relate:**

**Equation:**